STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/577,61
Source:	TEMP.

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER:						
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE							
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."						
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.						
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.						
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.						
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.						
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.						
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.						
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000						
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.						
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)						
Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules						
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.						
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid						



IFWP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/577,613

DATE: 05/11/2006

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

3 <110> APPLICANT: Alexander, Cherkasky 5 <120> TITLE OF INVENTION: PCT/IB 2004/003536: CHERKASKY FUSION PROTEINS CONTAINING ANTIBODY-, ANTIGEN - AND MICROTUBULE - BINDING REGIONS AND IMMUNE RESPONSE -6 REGIONS Corrected Diskette Needed 9 <130> FILE REFERENCE: -C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/577,613 C--> 11 <141> CURRENT FILING DATE: 2006-04-28 11 <160> NUMBER OF SEQ ID NOS: 14 13 <170> SOFTWARE: PatentIn version 3.3 15 <210> SEQ ID NO: 1 16 <211> LENGTH: 676 17 <212> TYPE: PRT C--> 18 <213> ORGANISM: (Artifical sequence W--> 20 <220> FEATURE: W--> 20 < 223 > OTHER INFORMATION:W--> 20 < 400 > 122 Ala Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu Summary Sheet. 26 Asn Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser 27 20 25 30 30 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Lys 31 35 40 45 34 Lys Leu Asn Glu Ser Gln Ala Pro Lys Ala Asp Asn Asn Phe Asn Lys 35 60 38 Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu Asn Met Pro Asn Leu Asn 75 70 42 Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser 43 85 90 46 Gln Ser Ala Asn Leu Leu Ser Glu Ala Lys Lys Leu Asn Glu Ser Gln 47 100 105 110 50 Ala Pro Lys Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe 120 51 115 125 54 Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly 55 130 135 140 58 Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu 59 145 150 160 155 62 Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Asp Asn 63 165 170 175 66 Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu 67 180 185 190 70 Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys 71 195 200 205

74 Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala Lys Lys Leu

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/577,613

DATE: 05/11/2006

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

75		210					215					220				
78 F			Ala	Gln	Ala	Pro	Lys	Glu	Glu	Asp	Asn	Asn	Lys	Pro	Gly	Lys
79 2	225	-				230	-				235					240
82 (slu .	Asp	Gly	Asn	Lys	Pro	Gly	Lys	Glu	Asp	Gly	Asn	Gly	Gly	Gly	Gly
83					245					250					255	
86 0	3ly	Met	Ser	Pro	Phe	Pro	Leu	Thr	Ser	Met	Asp	Lys	Ala	Phe	Ile	Thr
87				260					265					270		
7 0e	7al	Leu	Glu	Met	Thr	Pro	Val	Leu	Gly	Thr	Glu	Ile	Ile	Asn	Tyr	Arg
91			275					280					285			
94 <i>I</i>	Asp	Gly	Met	Gly	Arg	Val	Leu	Ala	Gln	Asp	Val	Tyr	Ala	Lys	Asp	Asn
95		290				_	295	_		_		300		-	_	_ ^
		Pro	Pro	Phe	Pro		Ser	Val	Lys	Asp	_	Tyr	Ala	Val	Arg	
99 3		_		_	7	310	_	_,	_ 2		315	~ 7	~	~1	~ 7	320
	Ala	Asp) GIZ	r Pro				g Phe	5 116			y GI	ı sei	C GII		a Gly
103	~ 1	~ 1	. D	. ml	325			34-4	- D	330		- **-	Mot	. 7\ >>>	335	
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107	Thr	C1.	. nl-	340		Dro	\	· ~1.	345		~ 7\] ·	a Val	77 a 7			Glu
111	1111	GT	355) 116	PIC	Cys	360		ı ASL) Al	a val	. vai		ı val	. Giu
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119		_	, –– -			390		_	_		39!			-	,	400
			. Asp	ıle	Lys	Arc				s Val	l Lei	ı Ala	a Lys	s Gly	/ Thi	His
123	_		•		405		, -	•	•	410			_	-	415	
126	Met	Gly	Pro	Ser	Glu	ı Ile	e Gly	/ Lei	ı Lei	ı Ala	a Thi	r Val	Gly	/ Val	l Thi	Glu
127				420)				425	5				430)	
130	Val	Glı	ı Val	Asr	Lys	Phe	e Pro	val	l Val	l Ala	a Val	l Met	: Sei	Thi	c Gly	/ Asn
131								44(445			
134	Glu	Let	ı Lei	ı Asr	n Pro	Glu	ı Asp	Asp) Le	ı Lev	ı Pro			= Ile	e Arg	J Asp
135		450			•	÷	455			_ •	7	460		T	_	_
			ı Arg	g Ser	Thr			ı Ala	a Thi	r Ile			ı Hıs	s GIZ	у Туг	Pro
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	Asp	Lei			Glr	Tle	His			z Arc	. Va	l Phe			s Pro	Gly
155	ııp	530		, 1120	. 011	,	535				, ·	540		2		- 1.
	Leu			Thr	Phe	Ala	•		ı Ası	o Ile	e Ası			l Arc	ı Lys	: Ile
159						550			- <u>-</u>	•	55!	-		~	d.	560
			e Ala	ı Lev	ı Pro	Gly	Ası	n Pro	va]	l Sei	c Ala	a Val	[Va]	LThi	c Cys	s Asn
163					565	_				570					575	
166	Leu	Phe	· Val	Val	Pro	Ala	ı Lei	ı Arg	g Lys	s Met	Gli	n Gly	/ Ile	e Lei	ı Asr	Pro
167				580)				585	5				590)	
170	Arg	Pro	Thr	: Ile	e Ile	Lys	. Ala	a Arg	g Lei	ı Ser	c Cys	s Asp	val	Lys	s Leu	ı Asp
171			595	5				600)				605	5		

DATE: 05/11/2006

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt Output Set: N:\CRF4\05112006\J577613.raw 174 Pro Arg Pro Glu Tyr His Arg Cys Ile Leu Thr Trp His His Gln Glu 615 620 175 610 178 Pro Leu Pro Trp Ala Gln Ser Thr Gly Asn Gln Met Ser Ser Arg Leu 635 640 179 625 630 182 Met Ser Met Arg Ser Ala Asn Gly Leu Leu Met Leu Pro Pro Lys Thr 650 183 645 655 186 Glu Gln Tyr Val Glu Leu His Lys Gly Glu Val Val Asp Val Met Val 670 660 665 187 190 Ile Gly Arg Leu 191 675 194 <210> SEQ ID NO: 2 195 <211> LENGTH: 2092 Some Error 196 <212> TYPE: DNA C--> 197 <213> ORGANISM: (Artifical sequence W--> 199 <220> FEATURE: W--> 199 < 223 > OTHER INFORMATION:W--> 199 < 400> 2200 tgctgcgcaa cacgatgaag ctcaacaaaa cgctttttat caagtcttaa atatgcctaa 60 120 202 cttaaatgct gatcaacgca atggttttat ccaaagcctt aaagatgatc caagccaaag 180 204 tgctaacgtt ttaggtgaag ctaaaaaatt aaacgaatct caagcaccga aagctgacaa 206 caatttcaac aaagaacaac aaaatgcttt ctatgaaatc ttgaacatgc ctaacttgaa 240 300 208 cgaagaacaa cgcaatggtt tcatccaaag cttaaaagat gacccaagtc aaagtgctaa 360 210 cctattgtca gaagctaaaa agttaaatga atctcaagca ccgaaagcgg ataacaaatt 212 caacaaagaa caacaaaatg ctttctatga aatcttacat ttacctaact taaacgaaga 420 214 acaacgcaat ggtttcatcc aaagcctaaa agatgaccca agccaaagcg ctaacctttt 480 540 216 agcagaagct aaaaagctaa atgatgcaca agcaccaaaa gctgacaaca aattcaacaa 600 218 agaacaacaa aatgctttct atgaaatttt acatttacct aacttaactg aagagcaacg 220 taacggcttc atccaaagcc ttaaagacga tccttcagtg agcaaagaaa ttttagcaga 720 222 agctaaaaag ctaaacgatg ctcaagcacc aaaagaggaa gacaacaaca aacctggtaa 780 224 agaagacggc aacaaacctg gcaaagaaga cggtaacggc ggcggcggcg gcgtttaggt 840 226 cacagtgctg tcgatatcac caaggtggct agaagacatc gcatgtctcc ttttcctctg 900 228 acatctatgg acaaagcctt tatcacagtc ctggagatga ctccggtgct tgggacagaa 960 230 atcatcaatt accgagatgg aatggggcga gtccttgctc aagatgtata tgcaaaagac 1020 232 aatttacccc ccttcccagc atcagtaaaa gatggctatg ctgtccgagc tgctgatggc 1080 234 ccaggagatc gtttcatcat tggggaatcc caagctggtg aacagccaac tcagacagta 1140 236 atgccaggac aagtcatgcg ggttacaaca ggtgctccaa taccctgcgg tgctgatgca 1200 238 gtagtacaag tggaagatac cgaacttatc agggaatcag atgatggcac tgaagaactt 1260 240 gaagtgcgaa ttctggtgca agctcggcca ggccaagata tcagacccat cggccatgac 1320 242 attaaaagag gggaatgtgt tttggccaaa ggaacccaca tgggcccctc agagattggt 1380 244 cttctggcaa ctgtaggtgt cacagaggtt gaagttaata agtttccagt ggttgcagtc 246 atgtcaacag ggaatgagct gctaaatcct gaagatgacc tcttaccagg gaagattcga 1440 1500 248 gacagcaatc gttcaactct tctagcaaca attcaggaac atggttaccc cacgatcaac 1560 250 ttgggtattg taggagacaa cccagatgac ttactcaatg ccttgaatga gggtatcagt 1620 252 cgtgctgatg tcatcatcac atcagggggt gtatccatgg gggaaaagga ctatctcaag 1680 254 caggtgctgg acattgatct tcatgctcag atccattttg gcagggtttt tatgaaacca 1740 256 ggcttgccaa caacatttgc aactttggat attgatggtg taagaaaaat aatctttgca 1800 258 ctacctggga atcctgtatc ggctgtggtc acctgcaatc tctttgttgt gcctgcactg 1860 260 aggaaaatgc agggcatctt ggatcctcgg ccaaccatca tcaaagcaag gttatcatgt

262 gatgtaaaac ttgatcctcg tccagaatac catcggtgta tactaacttg gcatcaccaa

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/577,613

1920

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/577,613

DATE: 05/11/2006

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

264 gaaccactac cttgggcaca gagtacaggt aatcaaatga gcagccgtct gatgagcatg 1980 266 cgcagtgcca atggattgtt gatgctacct ccaaagacag aacagtacgt ggagctccac 2040 2092 268 aaaggcgagg tggtggatgt catggtcatt ggacggctat gatggtcacc ag 271 <210> SEQ ID NO: 3 272 <211> LENGTH: 300 273 <212> TYPE: PRT 7 Same Error C--> 274 <213> ORGANISM: (Artifical sequence 277 <220> FEATURE: 278 <221> NAME/KEY: misc feature 279 <222> LOCATION: (264)..(264) 280 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid 282 <220> FEATURE: 283 <221> NAME/KEY: misc feature 284 <222> LOCATION: (278)..(278) 285 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid 287 <220> FEATURE: 288 <221> NAME/KEY: misc feature 289 <222> LOCATION: (281)..(281) 290 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid 292 <400> SEQUENCE: 3 294 Ala Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu 15 295 1 5 10 298 Asn Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser 25 30 20 299 302 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Lys 40 303 35 306 Lys Leu Asn Glu Ser Gln Ala Pro Lys Ala Asp Asn Asn Phe Asn Lys 307 50 55 60 310 Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu Asn Met Pro Asn Leu Asn 75 311 65 70 314 Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser 90 85 315 318 Gln Ser Ala Asn Leu Leu Ser Glu Ala Lys Lys Leu Asn Glu Ser Gln 105 100 319 322 Ala Pro Lys Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe 125 120 323 115 326 Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly 327 130 140 135 330 Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu 331 145 150 160 155 334 Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Asp Asn 335 165 170 175 338 Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu 339 180 185 190 342 Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys 343 195 200 205 346 Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala Lys Lys Leu 347 215 220 210 350 Asn Asp Ala Gln Ala Pro Lys Glu Glu Asp Asn Asn Lys Pro Gly Lys

DATE: 05/11/2006

TIME: 11:18:49

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Input Set : A:\PTO.RJ.txt
                     Output Set: N:\CRF4\05112006\J577613.raw
                             230
                                                                      240
    351 225
                                                 235
     354 Glu Asp Gly Asn Lys Pro Gly Lys Glu Asp Gly Asn Gly Gly Gly
                                             250
                                                                  255
     355
                         245
W--> 358 Gly Ala Ala Ala Ser Thr Ala Xaa Ala Ser Thr Ala Lys Glu Thr Ala
                                                              270
                     260
                                         265
     359
W--> 362 Glu Ala Val Ala Asp Xaa Ile Leu Xaa Lys Ala Gly Pro Leu Val Ala
                                     280
                 275
                                                         285
     363
     366 Val Ser Ala Val Ala Leu Asp Ile Thr Ala Tyr Pro
                                 295
                                                      300
             290
     367
                                                  7 Same Error
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     371 <211> LENGTH: 912
     372 <212> TYPE: DNA
C--> 373 <213> ORGANISM Artifical sequence
     376 <220> FEATURE:
     377 <221> NAME/KEY: misc feature
     378 <222> LOCATION: (792)..(792)
     379 <223> OTHER INFORMATION: n is a, c, g, t or u
     381 <220> FEATURE:
     382 <221> NAME/KEY: misc feature
     383 <222> LOCATION: (835)..(835)
     384 <223> OTHER INFORMATION: n is a, c, g, t or u
     386 <220> FEATURE:
     387 <221> NAME/KEY: misc feature
     388 <222> LOCATION: (844)..(844)
     389 <223> OTHER INFORMATION: n is a, c, g, t or u
     391 <400> SEQUENCE: 4
     392 tgctgcgcaa cacgatgaag ctcaacaaaa cgctttttat caagtcttaa atatgcctaa
                                                                                60
     394 cttaaatgct gatcaacgca atggttttat ccaaagcctt aaagatgatc caagccaaag
     396 tgctaacgtt ttaggtgaag ctaaaaaatt aaacgaatct caagcaccga aagctgacaa
                                                                               180
     398 caatttcaac aaagaacaac aaaatgcttt ctatgaaatc ttgaacatgc ctaacttgaa
                                                                               240
     400 cgaagaacaa cgcaatggtt tcatccaaag cttaaaagat gacccaagtc aaagtgctaa
                                                                               300
     402 cctattgtca gaagctaaaa agttaaatga atctcaagca ccgaaagcgg ataacaaatt
                                                                               360
     404 caacaaagaa caacaaaatg ctttctatga aatcttacat ttacctaact taaacgaaga
                                                                               420
     406 acaacgcaat ggtttcatcc aaagcctaaa agatgaccca agccaaagcg ctaacctttt
                                                                               480
                                                                               540
     408 agcagaagct aaaaagctaa atgatgcaca agcaccaaaa gctgacaaca aattcaacaa
                                                                               600
     410 agaacaacaa aatgctttct atgaaatttt acatttacct aacttaactg aagagcaacg
                                                                               660
     412 taacggcttc atccaaagcc ttaaagacga tccttcagtg agcaaagaaa ttttagcaga
                                                                               720
     414 agctaaaaag ctaaacgatg ctcaagcacc aaaagaggaa gacaacaaca aacctggtaa
     416 agaagacggc aacaaacctg gcaaagaaga cggtaacggc ggcggcggcg gcgcggccgc
                                                                               780
                                                                               840
W--> 418 gtcgaccgcg gncgcgtcga cggcaaagga gactgctgag gctgttgctg atganatact
                                                                               900
W--> 420 gganaagget gggeeacttg ttgetgtgte tgetgttgea ettgatataa etgeetaece
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     422 ctaaaagcca aa
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     426 <211> LENGTH: 3718
     427 <212> TYPE: DNA
C--> 428 <213> ORGANISM: (Artifical sequence
W--> 430 <220> FEATURE:
W--> 430 <223> OTHER INFORMATION:
W--> 430 < 400 > 5
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/577,613

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/11/2006
PATENT APPLICATION: US/10/577,613 TIME: 11:18:50

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 264,278,291 Seq#:4; N Pos. 792,835,844 Seq#:8; N Pos. 488,531,540 Seq#:9; N Pos. 440,483,492 Seq#:12; N Pos. 792,835,844

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seq#:1,2,5,6,7,10,11,13,14

VERIFICATION SUMMARY PATENT APPLICATION: US/10/577,613 DATE: 05/11/2006 TIME: 11:18:50

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

```
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:20 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:1, <213>
ORGANISM: Artificial Sequence
L:20 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213>
ORGANISM: Artificial Sequence
L:20 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:20
L:197 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:199 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:2, <213>
ORGANISM: Artificial Sequence
L:199 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213>
ORGANISM: Artificial Sequence
L:199 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:199
L:274 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:256
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:272
L:373 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:780
L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:840
L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:430 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>
ORGANISM: Artificial Sequence
L:430 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>
ORGANISM: Artificial Sequence
L:430 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:430
L:559 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:561 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:6, <213>
ORGANISM: Artificial Sequence
L:561 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213>
ORGANISM: Artificial Sequence
L:561 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:561
L:652 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:654 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:7, <213>
ORGANISM: Artificial Sequence
L:654 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213>
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L:654 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7, Line#:654
L:743 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:480
L:812 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:420
L:847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:480
L:881 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:883 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:10, <213>
ORGANISM: Artificial Sequence
L:883 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213>
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L:883 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:883
L:1028 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:1030 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:11, <213>
ORGANISM: Artificial Sequence
L:1030 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:11, <213>
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ORGANISM: Artificial Sequence

- L:1030 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11, Line#:1030
- L:1173 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
- L:1218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:780
- L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:840
- L:1252 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
- L:1254 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:13, <213>
- ORGANISM: Artificial Sequence
- L:1254 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:13, <213>
- ORGANISM: Artificial Sequence
- L:1254 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13, Line#:1254

VERIFICATION SUMMARY

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:50

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

L:1355 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14 L:1357 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:14, <213>

ORGANISM: Artificial Sequence

L:1357 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213>

ORGANISM: Artificial Sequence

L:1357 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14, Line#:1357